

Agilent Ref: 10001190-1
United States Application Serial No. 09/846,058

AMENDMENTS TO THE CLAIMS

Please amend claims 1 and 8, cancel claims 24-26, and add new claims 27-30. A complete listing of the claims, including their current status, is provided below.

1. **(Currently amended)** A method of fabricating an array of multiple features of different chemical moieties on a surface of a substrate substrate surface, comprising:
 - (a) determining an identity of a first direction across the substrate surface along which the substrate surface has a higher height uniformity than along a second direction across the substrate; and
 - (a) comparing height uniformity of a first direction and a second direction across a substrate to identify a first direction having higher height uniformity than a second direction, wherein said first and second directions are planar to said substrate; and
 - (b) placing the chemical moieties on the substrate so as to provide features thereon along rows more closely aligned with the first direction than the second direction, in order to fabricate an array of multiple features of different chemical moieties on a substrate surface.
2. **(Original)** A method according to claim 1 wherein the different chemical moieties are biopolymers.
3. **(Original)** A method according to claim 1 wherein the determining comprises measuring the thickness of the substrate at different positions.
4. **(Currently amended)** A method of fabricating an array of multiple features of different chemical moieties on a substrate surface, comprising:
 - (a) receiving the substrate from a remote location;
 - (a) receiving from a remote location in association with the substrate, an identification of a first direction across the substrate surface along which the substrate surface has a

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higher height uniformity than along a second direction across the substrate, wherein said first and second directions are planar to said substrate;

(b) placing the chemical moieties on the substrate so as to provide features thereon along rows more closely aligned with the first direction than the second direction,

in order to fabricate an array of multiple features of different chemical moieties on a substrate surface.

5. (Currently amended) A method according to claim 1 additionally comprising associating with the array an identification as to the direction of the rows and forwarding the array and associated the identification to a remote location.

6. (Original) A method according to claim 5 wherein the forwarding of the identification comprises applying an identifier on the substrate or a housing for the substrate, and saving the identification in a memory in association with the identifier.

7. (Original) A method according to claim 5 wherein the identification comprises reference to a shape characteristic of the substrate or a housing for the substrate.

8. (Currently amended) A method according to claim 1 wherein the substrate is rectangular and the first and second directions are perpendicular to each other, extend perpendicularly between respective sets of opposite edges of the substrate.

9. (Original) A method according to claim 1 wherein the rows are parallel with the first direction.

10. (Withdrawn) A method of fabricating an array of multiple features of different chemical moieties on a drawn substrate, comprising:

(a) determining an identity of a drawn direction of the substrate;

(b) placing the chemical moieties on the substrate so as to provide features thereon along linear rows oriented adjacent the drawn direction.

11. (Withdrawn) A method according to claim 10 wherein the determining comprise,

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measuring the thickness of the substrate.

12. (Withdrawn) A method of fabricating an array of multiple features of different chemical moieties on a surface of a drawn substrate, comprising:
 - (a) receiving the drawn substrate from a remote location;
 - (a) receiving from a remote location in association with the substrate, an identification of the drawn direction; and
 - (b) placing the chemical moieties on the substrate surface so as to provide features theron along linear rows oriented parallel to the drawn direction.
13. (Withdrawn) A method according to claim 10 wherein the rows are parallel with the drawn direction.
14. (Withdrawn) A method according to claim 11 wherein the substrate is rectangular and the drawn direction extends perpendicular to and between opposite edges of the substrate.
15. (Withdrawn) A method according to claim 10 additionally comprising associating with the array an identification as to the direction of the rows and forwarding the array and associated identification to a remote location.
16. (Withdrawn) A method according to claim 15 wherein the forwarding of the identification comprises applying an identifier on the substrate or a housing for the substrate, and saving the identification in a memory in association with the identifier.
17. (Withdrawn) A method according to claim 15 wherein the identification comprises reference to shape characteristic of the substrate or a housing for the substrate.
18. (Withdrawn) A method of fabricating an array of multiple linear rows of features of different chemical moieties on a surface of a drawn rectangular substrate, comprising:
 - (a) receiving the drawn substrate from a remote location;
 - (a) determining an identity of a drawn direction of the substrate; and

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(b) placing the chemical moieties on the substrate surface so as to provide features thereon along linear rows oriented parallel to the drawn direction, wherein the placing comprises:

- (i) depositing drops onto the surface from a drop deposition head while moving the head along one of the rows parallel with the drawn direction;
- (ii) repeating step (i) multiple times, each time at another one of the rows parallel with the drawn direction, so as to form the array.

19. (Withdrawn) A method according to claim 18 wherein the determining comprises receiving an identification of the drawn direction from a remote location in association with the substrate.

20. (Withdrawn) A method of reading an array of multiple features of different chemical moieties on a substrate surface, the array having rows of features, comprising:

(a) determining an identity of a first direction across the substrate surface along which the substrate thickness has a higher height uniformity than along a second direction across the substrate; and

(b) repeatedly scanning an illuminating beam across features in parallel paths which are more closely aligned with the first direction than the second direction.

21. (Withdrawn) A method according to claim 20 wherein the determining is based on an identifier carried on the substrate or a housing for the substrate.

22. (Withdrawn) A method according to claim 21 wherein the determining is performed by retrieving an identification of the first direction from the identifier.

23. (Withdrawn) A method according to claim 21 wherein the determining is performed by retrieving an identification of the first direction from a memory in response to providing the identifier.

24-26. (Cancelled)

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27. (New) A method of fabricating an array of multiple features of different chemical moieties on a surface of a substrate, comprising:

(a) comparing height uniformity of a first direction and a second direction across a planar substrate to identify a first direction having higher height uniformity than a second direction, wherein said first and second directions are planar to said substrate; and

(b) placing the chemical moieties on the substrate so as to provide features thereon along rows more closely aligned with the first direction than the second direction,

in order to fabricate an array of multiple features of different chemical moieties on a substrate surface.

28. (New) A method of fabricating an array of multiple features of different chemical moieties on a surface of a substrate, comprising:

(a) comparing height uniformity of a first direction and a second direction across a substrate to identify a first direction having higher height uniformity than a second direction, wherein said first and second directions are planar to said substrate; and

(b) employing a pulse jet printer to deposit chemical moieties on the substrate so as to provide features thereon along rows more closely aligned with the first direction than the second direction,

in order to fabricate an array of multiple features of different chemical moieties on a substrate surface.

29. (New) The method of claim 4, wherein said identification indicates the direction in which the substrate was drawn.

30. (New) The method of claim 5, wherein said identification is communicated to said remote location.